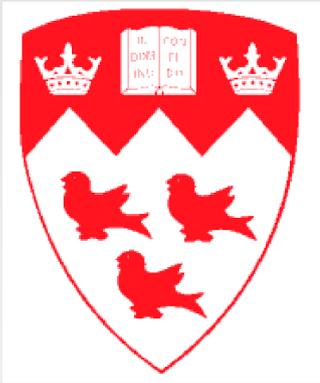


VERYy TrenDy: The VERITAS Transient Detector

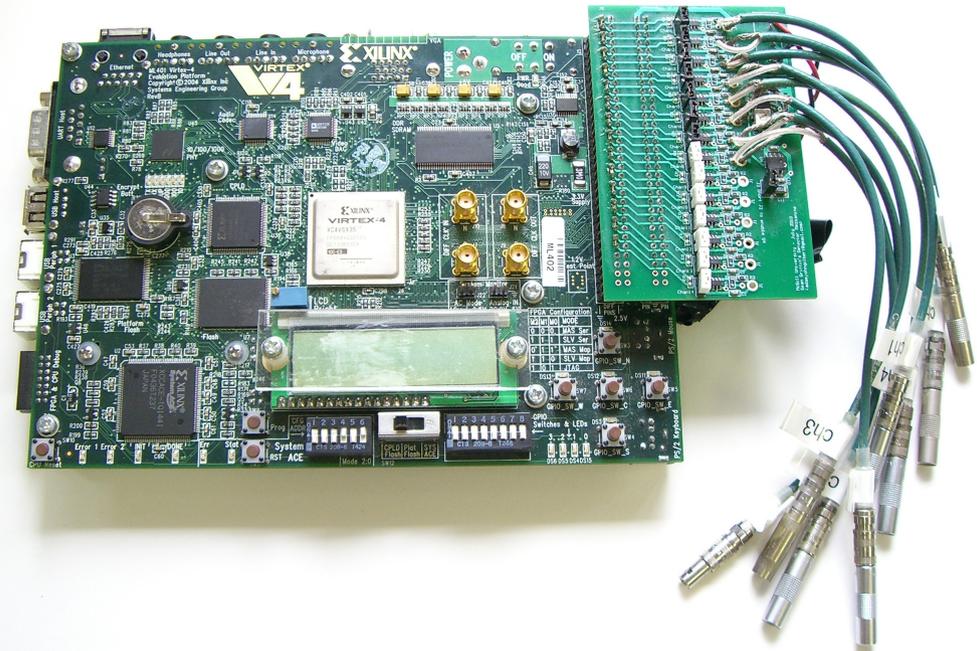
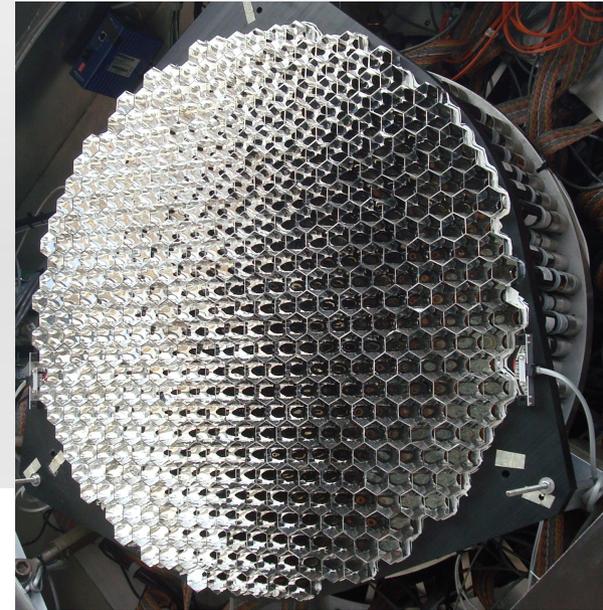
Sean Griffin

McGill University

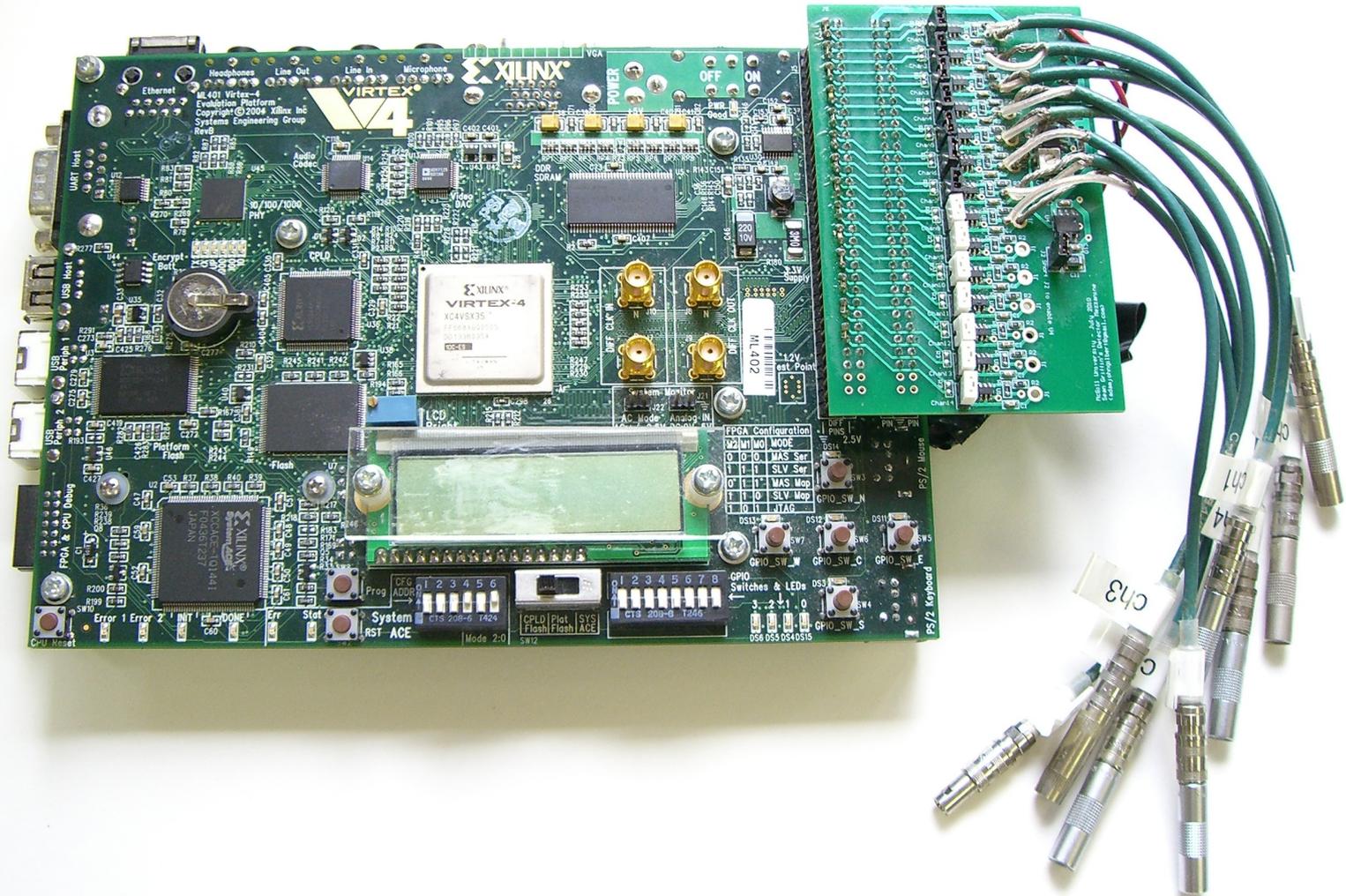


VERy TrenDy: The VERITAS Transient Detector

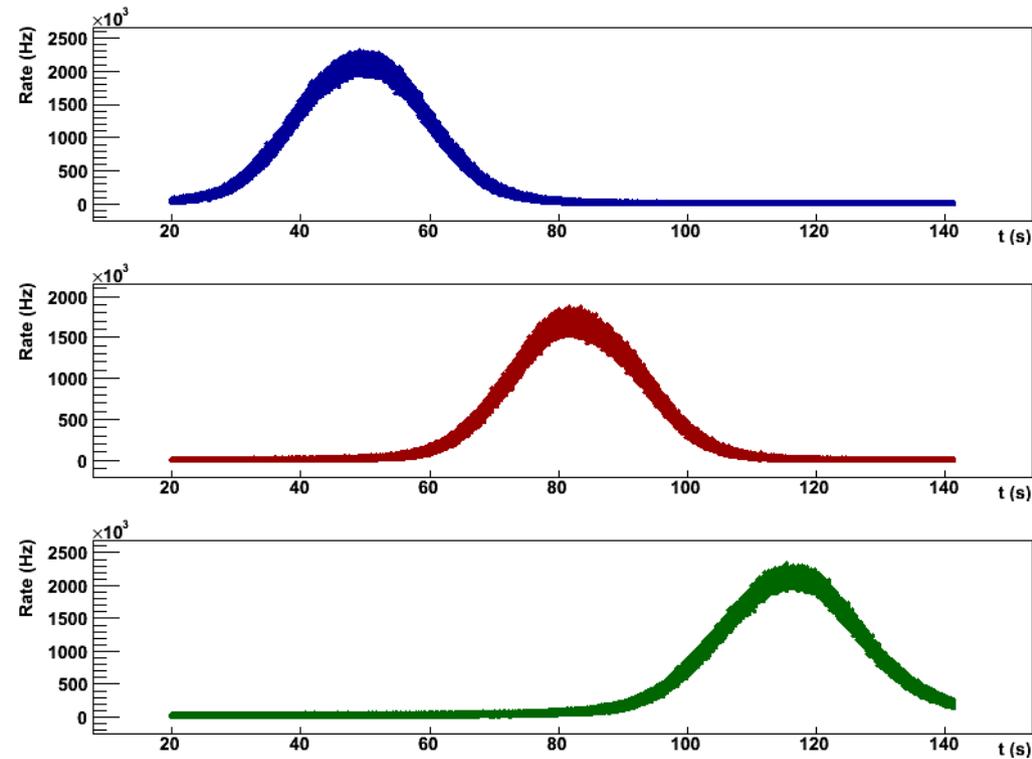
- (Pre-filters): VERITAS could not observe in more than $\sim 50\%$ moonlight.
- \rightarrow There was some observing time available (still is a little bit)
- What else can we do with the telescopes?
- VERITAS camera:
 - Sensitive to optical light
 - Very fast
- Designed a seven-pixel photometer with microsecond time resolution.
- No angular resolution, but it doesn't matter – looking at known sources.



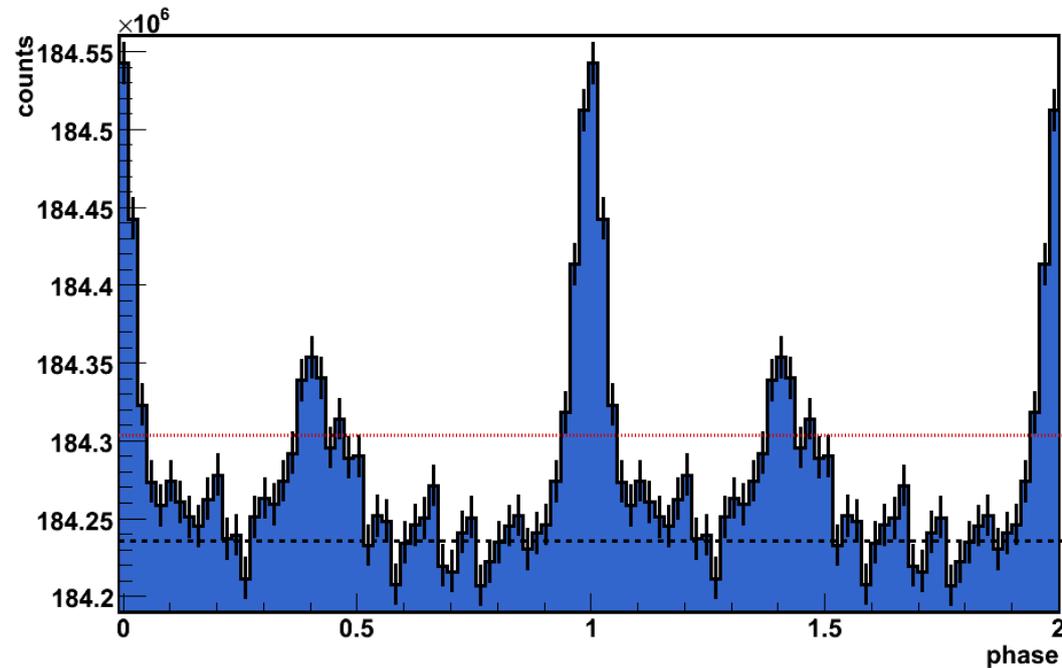
VERYy TrenDy: The VERITAS Transient Detector



Tests



Drift scan
(Whipple 10-m)



Crab Optical Pulsar
(VERITAS)

Sources

- Probably LMXBs accreting matter
- Flares with 0.1ms – 1ms time duration have been seen in LMXBs.
- Other sources show ms-timescale variability in the optical band
- Why not point a telescope and see if we see anything?
- What now:
 - Better scientific motivation
 - Figure out how sensitive we are
 - Hardware upgrades (sub-microsecond resolution).

